

# PATENT ABSTRACTS OF JAPAN

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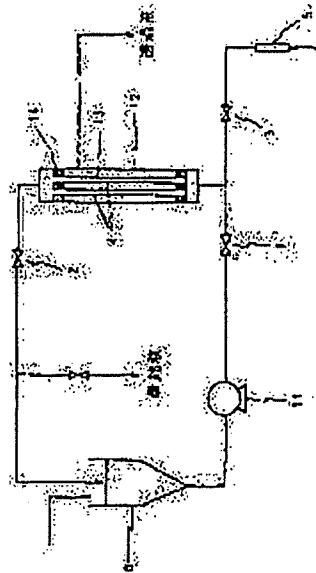
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## (54) DEVICE FOR AUTOMATICALLY DETECTING LEAK IN HOLLOW YARN ULTRAFILTRATION MEMBRANE MODULE AND GIVING ALARM

### (57)Abstract:

PURPOSE: To automatically detect a leak in hollow yarn and to give an alarm by applying air pressure to the inside of the hollow yarn, automatically measuring the amt. of air appearing on the outside of the yarn and making an alarm work automatically when a prescribed amt. of more of air is measured.

CONSTITUTION: A soln. is treated with a hollow yarn ultrafiltration membrane module incorporated into a soln. treating apparatus. At the end of the treatment, valves 1, 2 are closed, a valve 3 is opened and air is introduced into the inside 14 of the hollow yarn 13. The stock soln. remaining at the inside of the yarn is filtered by the air pressure and flows to the outside of the yarn, so the soln. on the inner surface of the yarn disappears and the air pressure becomes uniform. After the lapse of a certain time, the flow rate of air is measured with a flow rate sensor 5. When the measured flow rate is a prescribed value or above, a leak is judged to be present and an alarm is given.



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### LEGAL STATUS

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